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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,052	08/18/2003	Myong J. Lee	590130-2016	3109

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EXAMINER

MYERS, ADAM C

ART UNIT PAPER NUMBER

1761

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/643,052

Applicant(s)

LEE ET AL.

Examiner

Adam C. Myers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 and 35-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-34 and 47-51 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/18/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The following action is in response to cancellation claims 1-17 and 35-46.

Claims 18-34 and 47-51 are examined herein.

#### ***Claim Objections***

Claim 32 is objected to because of the following informalities: the phrase "pre-processed good product" appears to be a typographical error. The phrase "pre-processed food product" occurs in other claims. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

The term "up to a predetermined amount of time" in claim 47 is a relative term that renders the claim indefinite. The term " up to a predetermined amount of time " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "up to" implies a definite upper bound to a range. The claim states that there is a "predetermined amount of time," but does not set a quantitative value for the upper bound to this range.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 47 is rejected under 35 U.S.C. 102(e) as being anticipated by Cohn (US Pat 6,323,464). Cohn has disclosed a method for producing hot humid air for a proofing or holding operation. The method comprises the steps of

a) heating water in a water reservoir, the reservoir being a part of a steamer composition, to a substantially fixed temperature so that a substantially fixed temperature is maintained during the holding operation,

b) adjoining a food storage chamber to the steamer, the chamber having a plurality of storage compartments, the food storage chamber adjoined so that water heated in the reservoir passes into and through the chamber,

c) forcing air into the chamber by a blower via a duct, and heating the air, the heater being disposed in the duct,

d) movably guiding a plurality of drawers, the drawers being capable of moving independent of the other drawers,

e) independently opening a drawer, placing pre-processed food products in the drawer, and closing said drawer so that the pre-processed food is stored,

f) conditioning the pre-processed food product at a fixed relative humidity for a predetermined amount of time,

g) independently removing one drawer and removing a conditioned product.

The prior art teaches all the features of the claim discussed therein, and has been rejected thusly.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 48 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohn (US Pat 6,323,464). The disclosure of Cohn has been outlined above. The feature of the claim that has not been taught by Cohn is a step for the controlling the sequence of removal of the pre-processed food product. Disclosed in the method of Cohn is the step for control of temperature, humidity level, and amount of water based on temperature, humidity, or water content, respectively, thus providing motivation for necessary additional control algorithms. Controlling the sequence of removal of the pre-processed food products is an obvious and necessary control issue, given that freshness of the food product is proportional to the time it is stored prior to service. Controlling when and how the food products are removed would further ensure

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freshness of the food product, and the control would have been obvious to one of ordinary skill in the art. Furthermore, the simple removal of a product in the method of Cohn would read upon the instant claim, as Cohn has taught the removal of food products, and would have obviously been controlled, whether the removal is manual or automated.

In regard to claim 51, Cohn has taught a baffle located between the steamer and the food cabinet that vents steam produced in the steamer assembly into the food cabinet.

Claims 18-34 and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohn (US Pat 6,323,464) in view of Cooking.com. The disclosure of Cohn has been outlined above. In first regard to claim 18, Cohn has taught the features of the claim presented in steps (a)-(d), (f), and (h)-(i). Cohn has not taught the limitations presented in steps (e) and (g), those limitations being a plurality of carrier inserts, and the removable supporting of the carriers within a corresponding drawer. From the specification, it is the understanding of the examiner that the carriers are included in the invention with the purpose of facilitating drainage of excess moisture from the pre-processed food product by elevating and angling the food products. As noted in Cohn, pre-processed food products, particularly baked goods, stored in an atmosphere of excess moisture results in a product with a "mushy" exterior. Technology capable of diverting excess moisture would solve this commonly encountered problem, and was well known at the time of filing; for example, Cooking.com has taught such technology. Cooking.com discloses a dish rack, the dish

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rack comprising a substantially "X-shaped" wire holding area, a drainage rack disposed below the holding area, and a drainage tray, the drainage rack containing the drainage rack. The holding area elevates dishes and holds said dishes within an angled surface to facilitate the drainage of excess moisture. Given the technology known at the time of the invention, and the fact the simple angled drainage solves the common problem, one of ordinary skill in the art would have been amply motivated to adapt an assembly similar to the dish rack as a carrier within the invention of Cohn. Making the carriers removable would allow for easier cleaning and maintenance of the carriers and the drawers the carriers are disposed within. Cooking.com teaches this feature, such that the holding area, drainage rack, and drainage tray are separate pieces, removable from one another. Thus, one of ordinary skill in the art would have been motivated to make the carriers removable from the drawers.

In regard to claims 19 and 20, Cohn discloses that the food products being stored comprise baked goods, of which hamburger buns are a species, and would have been an obvious limitation.

In regard to claims 21 and 22, Cohn discloses that the water is heated up to 190°F. Thus, it would have been obvious for a water temperature maintained at the ranges presented in the instant claims.

In regard to claims 23 and 24, Cohn discloses that the air is heated up to a range of 140-180°F. Thus, it would have been obvious for a water temperature maintained at the ranges presented in the instant claims, being that a portion of the range of the prior art overlaps with a portion of the range of the instant claim 23. The range is not

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patentably distinct based on the overlap of the ranges and the claim language of approximately 135°F.

In further regard to the claims 21-24, it is commonly accepted that food needs to be heated to an internal temperature of about 140°F to about 180°F in order to eliminate microbiological hazards. The ranges of the prior art are designed to encompass such temperatures, and limitations with similar ranges in food storage units would not have involved an inventive step over previously known methods.

In regard to claim 25, Cohn discloses that a suitable range for relative humidity for food storage units is within the range of 20-90% relative humidity.

In regard to claim 26, Cohn has not disclosed a colored light for indicating sequencing of removal of food products. As noted above, Cohn has provided motivation for control of such sequencing with the disclosed control of temperature, humidity and water level. Cohn also discloses neon lights for indicating that the storage unit is turned on and that the water heater is turned on. The lights are indicative of the control algorithm for the unit, and additional lights would be obvious additions to obvious control algorithms.

In regard to claim 27, referring to Fig. 1 of Cohn, it is shown that six units can be held along the length of the storage unit. Referring to Fig. 7 of Cohn, one of ordinary skill in the art would have been motivated to easily and suitably place at least two food products along the width of the storage unit. The method of Cohn would thus allow for up to 12 units being stored within each compartment. Also, this limitation is an obvious matter of design, and is only bound by the dimensions of the holding unit.



In regard to claims 28-31, the issue of the obviousness of a step to facilitate drainage has been outlined above. In regard to the placement of openings to allow drainage, this is an obvious matter of design, such that the openings would be disposed in a manner to diver moisture from the food products and to the water reservoir.

In regard to claim 32, Cohn has taught a baffle located between the steamer and the food cabinet that vents steam produced in the steamer assembly into the food cabinet.

In regard to claim 33, Cohn has not disclosed a carrier disposed in a manner such that the food product placed upon said carrier is set at an angle of approximately 41.5°. The obviousness of the feature has been outlined above, and the holding area of the dish rack above, being substantially "X-shaped" allows of articles placed upon it to be supported at an angle of approximately 41.5°.

In regard to claim 34, Cohn discloses that the food product held within the storage unit of Cohn is held until time of service. One of ordinary skill in the art would have been motivated to store food in the storage unit of Cohn for up to 90 minutes given that storage units are well known for holding food for an extended period of time.

In regard to claims 49 and 50, the carriers and drainage features of the instant claim have been discussed previously, and the arguments supporting the rejection of these features are incorporated fully herein.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Myers whose telephone number is 571-272-6466. The examiner can normally be reached on Monday-Friday, 8am-4: 30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

acm

  
**KEITH HENDRICKS  
PRIMARY EXAMINER**